



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,696	09/29/2000	David L. Rechberger	39808/SAH/C715	1549

3017 7590 10/03/2003

BARLOW, JOSEPHS & HOLMES, LTD.  
101 DYER STREET  
5TH FLOOR  
PROVIDENCE, RI 02903

EXAMINER
----------

LAVARIAS, ARNEL C.

ART UNIT	PAPER NUMBER
----------	--------------

2872

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/676,696

Applicant(s)

RECHBERGER ET AL.

Examiner

Arnel C. Lavarias

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-37, 39-41 and 44-60 is/are pending in the application.
- 4a) Of the above claim(s) 2-37, 39-41 and 44-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/24/03 in Paper No. 20 has been entered.

### ***Election/Restrictions***

2. The Examiner notes that the instant application was previously subject to a restriction requirement in Paper No. 8, dated 5/22/02, the Applicant having elected Species XXVI in Paper No. 9, dated 7/22/02. Since a request for continued examination was filed under 37 CFR 1.114, the species previously elected, i.e. Claim 60, will be examined in the instant application.

### ***Response to Amendment***

3. The amendments to Claim 60 in Paper No. 20, dated 7/24/03, are acknowledged and accepted.

***Response to Arguments***

4. The Applicants arguments with respect to Claim 60 (See pages 3-5 of Paper No. 20, dated 7/24/03) have been considered but are moot in view of the new ground(s) of rejection.
5. Claim 60 is now rejected as follows.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 60 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 60 recites the limitation ‘...an optically transparent fiber coupling assembly having a body portion that is integrally molded with and substantially encapsulates said optoelectronic device,...’. However, it is unclear whether the encapsulating medium actually surrounds and contacts the optoelectronic device, or the encapsulating medium only provides a shell or casing around the optoelectronic device.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 2872

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 60, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over DeAndrea et al. (U.S. Patent No. 5515468), of record, in view of Leas (U.S. Patent No. 4901329).

DeAndrea et al. discloses an optical device package (See Figures 12, 13, 14) comprising a substrate (See for example bottom surface of 30 attached to 17 in Figure 14) having a mounting surface (See for example 17 in Figure 14); an optoelectronic device (See for example 10 in Figure 14) having a lower mounting surface operably coupled to the mounting surface of the substrate wherein the optoelectronic device is in electrical communication with the substrate (See for example connection wire from 30 to 16 in Figure 14); the optoelectronic device further having an active upper surface disposed substantially parallel to the mounting surface of the substrate (See for example 17 and 30 in Figure 14) and being configured to emit or receive light normal to the active upper surface (See for example 30 in Figure 14); a fiber coupling assembly having a body portion that is integrally molded with and substantially encapsulates (The Examiner notes that the tenth edition the Merriam-Webster's Collegiate Dictionary defines 'encapsulate' as 'to enclose in or as if in a capsule'.) the optoelectronic device (See 40/70 in Figure 14); the fiber coupling assembly further having a barrel portion extending from the body portion in a direction substantially parallel to the substrate, the barrel portion being configured to operably engage a fiber optic cable (See Figures 11 and 14; col. 3, lines 49-59; col. 10, lines 35-44); the fiber coupling assembly further having a planar mirror encapsulated within the body portion of the fiber coupling assembly to reflect light

traveling within the body portion (See for example 310 in Figure 14); and an enclosure coupled to the substrate that houses the optoelectronic device (See for example 55 and 52 in Figure 14). DeAndrea et al. lacks the fiber coupling assembly being optically transparent, the body portion of the fiber coupling assembly being configured and arranged to transmit light. However, Leas teaches an integrated laser array (See for example Figures 1, 4, and 6), wherein a transparent encapsulating medium (See 32 in Figure 6; col. 3, line 57-col. 4, line 49) is used to surround all the components (i.e. for example the laser 20 and planar routing mirrors 28' and 28'' in Figure 6) while allowing the light emitted from the laser to be transmitted within the transparent encapsulating medium. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the fiber coupling assembly be optically transparent, the body portion of the fiber coupling assembly being configured and arranged to transmit light, as taught by Leas, in the optical device package of DeAndrea et al., for the purpose of reducing scattering and Fresnel losses within the device, while providing protection for the components embedded within the encapsulating material from damage.

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent No. 4935856 to Dragoon.


Art Unit: 2872

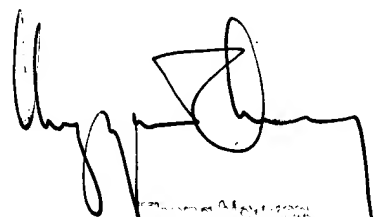
Dragoon is being cited to further evidence the use of transparent encapsulating media to surround optoelectronic devices (See for example 16, 48, 12 in Figure 3).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 703-305-4007. The examiner can normally be reached on M-F 8:30 AM - 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 703-305-0024. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

  
Arnel C. Lavarias  
9/17/03

  
Drew Dunn  
9/17/03